# The Educational Value of Political Economy.

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Until quite recently, the subject of educational values received little attention. It was thought that the discipline of the mind should be the chief aim of college life, and that this end was attained by studies that were separated by a wide gulf from the interests and pleasures of the world, out of which the student withdrew when his college life began. This discipline and exclusion from worldly influences were best promoted by a study of the ancient languages and mathematics and hence they acquired a dominant place in college work.

With the growth and success of the modern sciences a new and broader ideal of education has gradually won the favor of thinking men and caused a revolution in our ideas of educational values. We now send a boy to college to fit him for the world, and not, as formerly, to exclude him from it. The disciplinary value of a study receives less attention than formerly, while the pleasure a student gets from his work is thought to be a good indication of its value to him as a means of mental developement. Just as the taste of food indicates its fitness for

food, so does the pleasure in studying a subject show the educational value of studying it.

As a result of these changes a serious conflict has arisen between the old studies and the new, through which the former are being gradually displaced by the latter. Mathematics alone of the old studies holds an unquestioned place in the college curriculum. It is regarded as a model science and as setting the standard to which all sciences must conform and by which their progress must be measured.

All this, and much more, could be said of mathematics without exaggeration, yet are these the facts upon which the educational value of a subject depends? Is the utility of a science to the world at large to be accepted as the standard by which to measure its worth to a student, who wants not mathematics or any other one science, but mental culture and intellectual development.[1]

I would answer this question in the negative and shall try to show that the same tendencies that in college courses are displacing the old languages, will also displace the old and complete sciences by the new and less complete ones.

In the beginning all the sciences are inductive, but gradually, through the collection and generalization of facts and the increase of our knowledge, they change into a deductive form. It is not, however, in its inductive or deductive stage that a science has its greatest educational value. It is in the transition from one stage to the other. The transition is grad-

[1] In the *Educational Review* for February, 1891, the writer has an article on "The Educational Value of College Studies," in which the relation of the utility of the various studies to their culture value is fully discussed. It also emphasizes the educational value of the moral sciences.

ual, and often single portions of a science become deductive a long time before the others. When certain parts have become deductive, the character of the laws and the method of reasoning best fitted to the science, can be seen, while the other parts, yet inductive, furnish that incentive for earnest study through which they can be changed into a deductive form.

When, however, a science becomes completely deductive the various parts are subordinated to the whole. All data are cut out from the study that are not essential to the apprehension of the whole. Its parts are thus closely joined together, and form a compact body of doctrines. This process adds greatly to its utility, but detracts from its educational value. Mathematics is the best illustration of a science in its complete form, and the systematic presentation of it in our text-books makes it very useful as a preparatory study for other sciences, but gives it little value on its own account.

Physics is another illustration of a science that has now passed into this complete stage in its development where its utility is great, but its educational value is small. At an earlier period, physics was used as an illustration of what a model science should be, and Mill in particular made use of it in this way and contrasted it sharply with mathematics. What Mill said of it was doubtless true in his day, but since then physics has changed into as abstract a science as mathematics, and, consequently, it no longer possesses those marked characteristics which led Mill to esteem it so highly.

It is therefore necessary to seek new sciences to take the place of the completely deductive sciences

which must now be regarded rather as utility than as culture studies, and it is a part of my plan at the present time to show what advantages economics has as a subsitute for mathematics and physics in a course of study designed to develop the reasoning powers of the student.

In the present stage of its development it has special claims to be regarded as of great educational value and is, in many respects, a model science for the purpose of teaching.

The different parts are in different stages of development, and therefore all kinds of judgments, deductive and inductive, are made, and facts of every description needing investigation are to be found in abundance. The theory of distribution is highly deductive and furnishes the best examples in pure reasoning from hypothetical premises. Exchange also is largely deductive, though its reasoning is not so complete as that of distribution. In production on the contrary, induction predominates, yet we have some deductive parts which come in to influence the conclusions which a student can justly draw from his premises and facts. In consumption but little work has been done, while many practical problems lie wholly in the domain of induction.

It is also of advantage that it can be studied by problems, where each part will receive that emphasis which its educational value demands. If a given problem has special interest to a student there is no reason why he should not devote particular attention to it, nor will he lose anything in the science as a whole by so doing.

The theory of political economy is especially fitted to become a substitute for mathematics and physics.

It trains the intellect as well as they do and gives that confidence in reasoning needed to properly handle complex subjects. It is also of advantage that the chains of reasoning are not as long and that the return to elementary principles is so frequent. Every fresh start gives an opportunity for new deductions, to test the power of the student, to see the old truths under new forms, and to verify his conclusions by the facts of every-day life.

It is also worthy of mention that political economy trains a student in reasoning similar to that which he has to do in every-day life. All those judgments which everyone must continually use in practical affairs are exactly of that kind and character that we find in political economy, and if the student has had the advantage of a thorough training in economic reasoning, he will be much better prepared for active life than if he were drilled in the dogmatic reasoning from simple premises such as one finds in mathematics or physics. It has the further advantage that all its premises are subjects of discussion and doubt, and hence are more likely to arouse the interest, or perhaps the opposition, of the student, and this makes him more careful of his tests. Unquestioned truths have little educational value. A study of premises is of far greater importance than a study of the form of reasoning through which conclusions are drawn from given premises. As the premises do not conform exactly to the conditions of the concrete world, they give much more room for examination and discussion than is true of the axioms of geometry or the groundwork of physics.

Economic theory is of special value as a means of developing the reasoning powers of the student,

through the frequent use which is made of hypothesis in order to find the causes that are at work in complex cases. Whenever the hypothetical method is used, the various subordinate facts are dropped out of sight, and certain leading principles are joined closely together and held firmly in mind in a way that leads to clear thinking. It thus requires a great degree of mental power to trace clearly the conclusions which can be drawn from a given hypothesis, keep them separate from actual conditions, and, yet, in no way confuse one with the other. The difficulty in doing this is greatly increased when the hypothesis in many respects differs from the actual facts, and under these circumstances the student must cultivate a great power of holding definitely to the working of certain laws, or he will fail to get the culture he should from the use of the method.

The science also cultivates the imagination of the student and leads him to form mental pictures of society, similar to what a geometrician has of the forms of a figure. Each economist has in mind a concept of the economic world he is describing, just as a student of geometry has in mind abstract forms of the concrete bodies about him. To form a clear concept of economic relations is a hard task, but it is excellent discipline, and gives an economist a much better grasp upon general principles than he could obtain in any other way. He must first obtain a clear idea of the working of each economic premise, and then bind them all together in a way that will show their relations to one another, and the combined effect of all of them upon society. The concept is thus a skeleton, so to speak, of the actual society of which the economist forms a part, and not an ideal of the

best possible society he could devise.[1] In the writings of Ricardo, we find this power developed to a remarkable degree. His ability to overlook the subordinate and discordant facts of society which do not bear upon the general problems, seems fully as great as that of a geometrician who sees the figures of geometry, without ever thinking about the concrete forms in which the figures are found in actual life. Ricardo seems to have thought no more about the differences of the actual man in society from the economic man that he had in mind, than the geometrician thinks about the actual lines in solids not being the straight lines which he uses in his figures.

All economic thinkers, to a greater or less degree, form concepts in their own minds by the aid of the general principles which they have obtained from their studies. Each one has a definite concept which does not conform to the actual society in which he exists. He is, perhaps, unconscious of the fact that he has in part created the economic world, which he has in mind, yet nevertheless if he is a successful economist, he has done so to some degree, and the more successful he has been, the greater the probability is

[1] I wish to contrast "concept" with "ideal" so as to bring out the distinction between them. In one the premises and laws are those actually operating in the present economic world united in a whole for the purpose of explaining the visible phenomena. In the other new premises are included, and others are modified so as to make a combination that will give a society as free as possible from evil and suffering.

I think the formation of proper ideals is a necessary part of the work of the teacher. The formation of concepts, however, is, more elementary and should come first. With the material which the study of concepts gives ideals can be formed that will be a source of inspiration, yet without that narrowness and bigotry which comes from having a crude ideal, created by an unconcious process, out of a few characteristics of our economic world.

that his concept deviates largely from the actual society in which he lives. This fact gives to the teacher one of the best means of cultivating the imagination of his pupils. In the study of each author he should endeavor to make them form a picture of the economic world which the author had in mind. It is very useful to contrast with one another the concepts of society which the Physiocrats, Adam Smith, Ricardo, Mill and other economists formed, and thus give to the student the power to form new concepts out of the materials he finds in the world about him.[1]

The history of mathematics is of great value in showing what will be the line of progress in political economy. The power of thinking of geometrical figures apart from their material content was gradually developed. First of all, men learned to think of lines separate from material bodies; they then became able to isolate planes and think of them as abstract concepts; and lastly, they acquired the power and ability to think of geometrical solids. Ricardo was the one who did for economics what Plato did for plane geometry. He selected the outlines of a physical economy, and separated them from the concrete phenomena of society of which they form a part. His success lies in his power to completely isolate each problem from a complex whole, just as a

[1]In his essay on Ricardo and Malthus (Vol. iv No. 5 of this series of Publications), the writer has endeavored to show how different were the economic worlds which these men had in mind. Although they lived at the same time, each one formed his concept of English society from those characteristics of it which were most impressed upon him by his individual environment. Their writings thus form a good illustration of the way economists get the world of which they write.

mathematician separates each single plane from the material solid of which it is a part. This was a great progress over the earlier concrete methods, and in teaching the student to isolate economic problems and to separate the form from the content, he gains a mental power similar to that given by plane geometry.

Yet, after all, the system of Ricardo was but plane economics. So long as economics is treated in this way there are two kinds of economics opposed to one another. On the one hand there is an objective economics based upon the physical facts of the objective world and the natural laws which regulate them. On the other hand the new school of economists, led by Jevons and Menger, has established a subjective economics, based upon the psychological changes in man and the subjective estimates which man places upon material commodities. The Ricardian economics was objective, because it supposed an unchanging man under different objective physical conditions. A subjective economics, however, supposes a changing, progressive man, under fixed physical conditions. In the studies relating to man we find the basis for such a subjective economy, just as in the studies of the physical world we find the basis of an objective economy.

There is no way to harmonize these two points of view in an economics of two dimensions. The development of this new school will therefore lead to the rise of a solid economics, where the problems of a changing man can be treated in connection with changes in the physical world in which the man lives and through which he is conditioned. In this way deductive economics will become more real, and

thus more valuable, because changes in the environment are accompanied by changes in society and in men. This kind of economics will be much more difficult than was the plane economics of Ricardo, and it will increase proportionately the culture and mental power of the successful student. Just as passing from plane to solid geometry helps the development of the student's mind, because of its increased difficulties; so will the new economics be of proportionately greater value to the student than that which is represented by Ricardo.

The discussions relating to the tariff afford a very apt illustration of the need of a change from plane to solid economics. The stronghold of the protectionist lies in the effects which protection has upon man and society. Through it a better class of men may survive, and society becomes more useful to the individuals that compose it. With protection nature may do less for man, but if man becomes more intelligent and efficient, the gross return may be increased in spite of the less use he has made of natural forces.

The advantages of free trade, however, are best shown by emphasizing the effects of the physical world on the production of wealth. A free-trader always keeps before him the conditions of the environment which determine the production of wealth, and seeks to establish his case by showing that his system utilizes the physical forces more fully than a protective policy can do.

The two opposing parties are looking at different faces of the same solid, and forget that its contents cannot be determined from the two dimensions which form any one face.

The second leading educational value of political economy lies in its history. The science is so modern that the origin of each doctrine and its gradual development can be easily traced. It is easy also to show that all institutions and policies are based upon peculiar economic conditions which must change with the gradual development of economic facts. All institutions are means of progress in the start, but at length, through social progress, become barriers to further progress and must be discarded. We hardly cease the struggle for the introduction of an institution before we begin a new struggle to get rid of it. Any society that is in a dynamic condition is constantly forming new institutions and developing new conditions in society which bring about a conflict between society and the institutions to which it was fitted in the past.

The caste system, and even slavery itself, when viewed from the historical point of view, seem as much a necessity to the ancient world as they have been a curse to the modern. At first they were means of progress and helped in the development of the nations that introduced and made a proper use of them, but they at length ceased to be means of progress, and finally stopped all further development of those nations which held to them. In the more modern times the same facts show themselves. Feudalism and the guilds were in their proper time means of improving society and helping along its progress, yet through the advance in society which they caused, they became unfitted to society, and thus needed to be displaced by new institutions, more in harmony with modern civilization.

The mercantile school, as well as that of the physiocrats, were essential parts of the economic system by which the modern industrial world took its rise. They became in time unsuited to the industrial system of more recent years, and had to be displaced by another system that grew up out of the increasing demand for greater freedom in commerce and industry. The school of Adam Smith, which followed them, while well fitted to help along the industrial progress of the world for a time, seems like the systems it displaced, to have had its day and its utility, and is now likely to be displaced by some new system, not yet fully developed, more in harmony with the conditions of the present and of the immediate future. It will be as powerless to survive the great radical changes in our economic environment now going on, as any of the past systems were to survive the conditions to which they were fitted. The old cannot return. The present cannot remain.

The history of economics thus helps us to understand and appreciate the policies of other nations who adopt a different policy from our own, and to value rightly the motives of persons in our own nation, who think another economic policy than the one we advocate would be better for our time and nation.

When rightly studied it gives to the student a catholic feeling which it is not possible to obtain in any other way. The errors into which he is likely to fall from too great a use of the theory, is corrected by its study, and in this way theory and history are brought into harmony, and with a great increase in their educational value. It modifies our notions of individual rights and causes us to distrust the shallow kind of cosmopolitanism that had such a charm

to our fathers. It displaces the idea of absolute perpetual laws, and puts in its place conditioned laws depending upon orderly changes. It also shows the dependence of man upon nature, and at the same time man's power to modify his environment.

Political economy has a third leading source of educational value, in the study of facts. For such a purpose it has many advantages not within the reach of other sciences. There is no place where real laboratory work can be performed with better results than among economic facts. On all sides there is an immense wealth of material which may easily be collected and utilized. We have financial reports, municipal reports, and those on trade, commerce and navigation. Almost all State documents furnish to the student invaluable information as to economic facts and conditions. Our railroad and corporation and bank reports are also mines of great value, while the census gives to the student an immense collection of statistics, the importance of which cannot be overestimated.

From all these sources the verification of economic laws can be made, and the effects of new inventions and other economic changes can be traced. There are many new problems to investigate, the facts of which are little known, and any student, who cares to take the time and trouble to get at these sources of information, can add materially to our knowledge of economic laws and conditions, and greatly aid in the progress of the science.

Political economy thus joins in one body a group of characteristics that make it of great utility to the student. It cultivates both observation and reflection. It gives to him the discipline and logical train-

ing of mathematics, the culture of history and the inductive work of the physical sciences. It brings his imagination into activity and arouses his sympathy for those who suffer from the evils of society. It also creates an interest and enthusiasm for the study of social problems through which he is spurred on to seek a solution for the many perplexing difficulties that beset human progress.

In spite of all these possibilities the great educational value that lies in this study is often neutralized by the errors of teachers who do not understand how to put the various parts of the science in such a relation to one another that they will have an accumulative effect on the mind of the student. The culture a student obtains from his work depends as much upon the method of instruction as upon the content of the science taught. It is therefore proper to call attention to the leading errors of this kind to which teachers are liable, and in this connection I shall point out five of them.

## Teaching Political Economy as a Compact Whole, Like Mathematics.

The same danger, however, lies before an instructor of economic theory, as in the case of mathematics and physics. The teacher is apt to present it as a connected body of truths and value the parts merely in their relation to the whole. He is apt to overlook all economic phenomena which do not fit nicely into the economic scheme which he has formed. In this way many economic facts and relations are neglected and others are emphasized entirely out of proportion to their real importance.

This method of teaching leads to the subordination of each part to the whole system which the teacher wishes to inculcate. Some one doctrine or few doctrines receive constant attention, and all others are regarded as mere stepping-stones leading to those truths which the teacher desires to impress upon the pupil.

This is a great fault of the Ricardian economics, especially when the theoretical part is subordinated to the teaching of the doctrines of the Manchester school and creed of free trade. The whole body of doctrines that makes up what is called orthodoxy in political economy, when presented as a means of inculcating given ideas, cramps the mental development of the student, instead of aiding in his progress. Often it is to be feared that at the end of his course in economics, the student leaves college with the impression that the whole system of economics is of importance only in developing the ideas of free trade, and of State inactivity. This is a great error and one that should be avoided by every earnest teacher. To have an educational value, each doctrine should be examined by itself and tested to find the degree of probability that must be given to its proof. Each doctrine must be so thoroughly presented and receive such an emphasis, that the student can derive from it all the advantage it can impart. The graduate courses are the proper places in which to treat of the relation of doctrines to one another and of the whole as a unit. The student has now acquired the culture and mental power needed for such work, and can pursue it without that detriment which he would have received had he followed some rigid system from the start.

THE USE OF REDUCTIO AD ABSURDUM ARGUMENTS.

The error in using these arguments comes also from a too great influence of mathematics upon the reasoning of political economy. In mathematical reasoning the number of alternate possibilities is definitely known. When there are only four possible suppositions, and three of them are proved to be false, we can truly reason that the fourth is a true one. If we prove that an angle is neither acute nor obtuse, we can justly conclude that it is a right angle. But in political economy so great a rigidity in reasoning can never be secured. We are never sure of the number of suppositions which might explain the case in hand, and hence when we prove that all but one of them are untrue, it does not follow that the remaining supposition is correct. It often happens that we overlook some unknown factor, through which our reasoning is weakened.

The errors that arise from this form of reasoning are numerous, and show themselves in almost every part of political economy. Take, for example, the discussion of the silver question. I have recently seen an argument placed in this form: The general fall in price that has recently taken place must come from one of three sources; from a reduction in the cost of transportation, from a reduction in the cost of production, or from an increased value in gold. Then it was shown that neither the reduction in the cost of transportation nor in the cost of production would account for the fall in prices which has taken place, and as these two causes could not account for the changes in prices, the conclusion was drawn that there had been a marked appreciation in the value of gold.

The error lies in the fact that there may be other causes than these three that have, to some degree, helped to bring about this fall of prices, and the mere fact that so far only three possible causes have been enumerated does not make the conclusion legitimate that because two of them cannot account for the change in prices, the change has resulted from the third cause.

As a second illustration I would mention the argument of the Socialists, which is based upon the so-called iron law of wages. The reasoning of Ricardo, which goes to show that wages will always remain at a minimum, is very carefully followed by the Socialists; and having to their satisfaction established this law, they proceed to make a *reductio ad absurdum* argument, by claiming that, as wages tend to a minimum, competition is a failure as a regulator of prices. Consequently some other system of economics must be introduced through which competition will be entirely displaced by some other form of social organization.

In Henry George's *Progress and Poverty* there is a typical argument of this class. He wishes to draw the conclusion that we must make land common property, by showing that this is the only remedy for the social evils and poverty which afflict society. He finds that six other remedies for poverty have been proposed—

First—Greater economy in government.

Second—Better education of the working classes.

Third—Combinations of workingmen.

Fourth—Coöperation of labor and capital.

Fifth—Governmental interference.

Sixth—A more general distribution of land.

Each of these six proposed remedies he shows to be insufficient, and he then draws the conclusion that the only true remedy is to make land common property. He takes twenty-five pages to show the insufficiency of these remedies, but when he comes to his own it is stated in half a page. He gives no affirmative argument for his remedy. His sole reliance is on the insufficiency of the remedies which others have proposed.

Any such method of reasoning is radically incorrect in economics. We are so uncertain as to whether or not we have all the possibilities before us, that we cannot reason in this manner. Every proposition that is set up as a principle in economic discussion should have positive arguments as a basis. It should be grounded upon well known economic facts and not be in any way connected with the failures of other proposed remedies or upon the falseness of other doctrines. It is an indication of crude thinking when any one resorts to theory when positive facts are lacking. Deductive reasoning is too often looked upon as a means of bridging over a lack of facts. The use of deductive reasoning is justifiable not where the facts are known, but where they are best known. The purpose of deduction is to arrange and correlate these known facts in a way that will show the law upon which they depend; and all deductions are radically defective that are not confined to this field.

### Putting Theory and Fact in Opposition.

Another common error in discussing economic subjects lies in the endeavor to disprove theories by arranging facts and history in a way that seems to

show the theories to be false. Theories, however, are not to be disproved in such a manner. A theory can be properly met only by a theory, and facts by facts. By this I mean that to show that a mass of facts do not correspond to the conclusions which may be drawn from a given theory, does not disprove the theory. It merely indicates that some other cause is working which prevents the effects of a given theory from being shown by all the facts. It must be kept in mind that in economics there are many conflicting causes in operation, and, as a result, the effects of one cause are often counteracted by the effects of other causes, and in this way a direct verification of certain theories is impossible.

A good illustration of this comes from the discussion of the law of population. Malthus has given us a theory based upon certain well known facts of human nature and the physical world. The opponents of Malthus do not seek to deny the facts upon which he based his theory. This would be a legitimate process, because, if the facts upon which the theory is based, should be disproved, then, of course, the theory would fall. Instead of proceeding in this way, they endeavor to show that the conclusions which can be legitimately drawn from the Malthusian theory are not true in the world about us. They show, or at least endeavor to show, that instead of the world being overpopulated, it is really underpopulated, and in many parts not populated at all. But even to admit the truth of all the facts they present does not disprove the Malthusian law. It merely shows the complexity of the causes which control the growth of population.

A second illustration can be found in Carey's discussion of the law of rent. He endeavors to show that instead of there being any surplus from land above the cost of labor and capital to go as rent, there is a real deficiency, the value of the produce not being equal to the return needed to replace the capital and labor expended in bringing the land into cultivation.

The theory of rent can only be disproved by facts that would disprove the premises upon which the theory rests. So long as there are differences in soils there will be rent, even if the whole value of the land of a country is less than the cost of bringing it into cultivation. The part of the whole produce of the country is rent that, in distribution, follows the law of rent, whether the source of the return from land is due to natural or acquired qualities. Carey recognizes the reality of rent as a factor in distribution by showing that the fall in rate of return from investments in land was more rapid than the fall in the rate of interest. To put, therefore, the facts showing the decrease of rent as a whole in opposition to the theory of rent, was a serious error on his part which only reacted against himself and kept the strength of his position from receiving due recognition.

The third illustration can be obtained from the theory of money. It is claimed that the quantity of money, since the discovery of America, has increased twelve-fold, and from this it is argued that the quantitive theory of money is false, because with a twelve-fold increase in the quantity of money there should be twelve-fold diminition in its value.

The fallacy of this reasoning is apparent; yet it is a typical argument of its class. The theory to be discredited is given a narrow interpretation and then some well-known fact is shown to contradict the conclusions which the premises seem to justify. This style of arguing is satisfactory to those who think their reasoning is wholly inductive, and that no conclusion is justifiable that does not harmonize with all the facts.

Another class of persons err in the opposite direction. They have acquired the mathematical instinct of overlooking the content of the objects they have in mind to study their form. They form simple theories in economics and apply them to society with little regard for the complex relations of modern industry. If their theories are said to be out of harmony with observed facts, they sweep aside the objections as invalid. Their confidence in theory is so great that facts always suffer when an opposition arises. That men in our world do not conform to their fictions is of as little concern to them as the actual lines of a solid are to a geometrician. Their science is one of hypothesis alone and without those tests of verification by which the theories in other sciences are measured.

In every economic discussion we find these two extremes of opinion. Both parties desire to make the issue appear to lie in a place where there is an apparent opposition between theory and facts, and then the one party brushes aside the facts as eagerly and as easily as the other does the theory.

A teacher, however, should exercise extreme care not to bring theory and fact in opposition, because in so doing he greatly decreases the educational value

of both. Theory is of great value in giving to the pupil a confidence in reasoning. History, when properly taught, gives the student a liberal, catholic tone. The purpose of statistics, however, is to give to the student a love of facts.

In elementary courses, therefore, these three things should be kept apart so as to allow each one to have its full effect in the development of the student. Emphasize the opposition between history and facts and theory, and you destroy the student's confidence in his reasoning, and thus retard his mental growth. Complicated problems where there seems to be such an opposition, should be reserved for graduate work, when the student has acquired such a confidence in his reasoning, and such a love for facts and history, that he can handle these problems without any detriment to his further progress.

## Beginning with the Concrete Instead of the Abstract.

In the study of any subject, it is the usual method to begin with the concrete. This course is justifiable where the phenomenon is so simple that valuable inductions can be made from the facts alone. In the study of our institutions, for example, the local governments are simpler in their organization than the general government, and hence, in beginning with the former, the teacher does what is right.

The opposite, however, is true of economics. The concrete facts are much more complicated than are the theories with which we explain them. The causes working in political economy so often interfere with one another, that the results of their com-

bined action are very deceptive unless the theory of the action of each one is first clearly understood. A good illustration of this is to be found in foreign trade. The fact that commerce is a barter of goods for goods is usually overlooked by those who engage in trade. In the international distribution of money, and in the action of Gresham's Law, the theory is very simple but the facts are complicated.

It is not possible to treat these subjects adequately without having first a firm grasp of the simple theories that lie beneath the surface. We cannot too much emphasize Ricardian clearness as opposed to the crude thinking which we find among the adherents of the mercantile school. The causes of the confused notions of the latter lay in their method of endeavoring to discover the laws of political economy by merely collecting the facts that bear upon it. The Ricardian method is the reverse of this, and his success comes from the definite and decisive way in which he arranges the many confused facts so as to show the simple laws upon which they are based. There was a lack of order in this class of facts before the time of Ricardo, and to him and his method is due the present advanced condition in which we find the discussion of these problems.

In the popular discussion of the tariff both protectionists and free traders are likely to make this mistake. They each try to show that their policy raises the value of food when they are talking to farmers, but when they are talking to other classes interested in cheap food, they seek to show that their policy lowers its value. From the multitude of complex and contradictory facts to be found on all sides each party selects those that confirm their views. There is no

relief from this confusion except through a resort to theory.

Before discussing the complicated facts of international trade, it should be determined whether a high or low value of food is desirable. The opposition between the value of food and raw material and the products of labor must be clearly seen before any valuable discussion upon the tariff can be had. Every clear thinker must decide whether he wishes the one or the other to have a greater value than it now has, and only after he has made such a decision is he in a state of mind that will allow him to consistently discuss the intricate problems that arise in connection with the tariff.[1]

Another illustration is to be found in the discussion relating to the theory of value. Before the time of Menger and Jevons this whole subject was in a state of confusion. It was not possible to state the law of value in any simple form. Now, however, all this has been changed. The complicated phenomena of value and of the cost of production can be readily explained by a theory so simple that it seems difficult to see why it was not one of the first principles of political economy that was brought to light.

## Mixing Morals and Politics with Political Economy.

In calling it an error to mix the principles of morals and politics with economic discussions, I have no desire to underestimate the importance of either of them. There can be no full discussion of economic problems without bringing political and

[1] See Chap. V of the writer's *Economic Basis of Protection.*

moral principles into relation with the economic. The question at issue is one of order and method. Logical discussion demands that the premises derived from different sources should be kept distinct, and that any principle that is really moral or political should be clearly recognized as such when it is brought into the realm of the economic world. When this precaution is neglected we usually find that some degenerated form of morality or politics is inserted into economic discussion, and in this way our conclusions are weakened and false doctrines keep their place in public opinion. A moral or political principle should be thoroughly discussed as a part of ethics or politics before it is introduced into economic discussion, and any principle that will not stand this test is not deserving of consideration in economics.

Take as an example the doctrine of Henry George. By his method we have confused together arguments that are economic with those that are political and moral. We find the Ricardian law of rent put in the foreground. This is clearly an economic doctrine. But from the law of rent alone we could not draw any such conclusions as Mr. George desires. Coupled with the law of rent we find the negative politics of Herbert Spencer and the morality of taking land without compensation. The politics of Mr. Spencer should of course receive due attention in the proper place, but it does not lead to clear thinking to have his ideas inserted in an economic discussion, as though they were really based upon economic principles. The morality of public seizure without compensation likewise is clearly not an economic problem. It belongs to the field of morals, and should

be discussed as an ethical question along with other propositions of a like character. No correct judgment of the rights and obligations of land owners is possible without a complete history of land tenure. When, therefore, these three separate points of view are thrown together and the whole presented as if it were purely an economic argument, we have a condition of thinking which produces undesirable results. It deceives the unwary and creates intolerence and dogmatism.

In the doctrine of free trade we have another combination of politics and morality with economic doctrine. The economic side of this argument lies in the doctrine of comparative cost. With this we have bound up the *laissez faire* conception of government and a degenerated form of Bentham's system of morality. Even if Bentham's morality were presented in a pure form, it should stand alone—but a corrupt form of it demands especial attention. That self-interest as a basis of morality is a much broader and more general proposition than that the interest of individuals leads to the interest of the whole nation. Yet the position of the uncompromising free trader involves more than this. It assumes that the greed of individuals—a very different thing from the interest of individuals—leads to the general good.

It seems only just, therefore, that the free trade argument should be separated into these three distinct parts, and each one of them discussed by itself, in connection with its own proper topic. First, let us have what conclusions it is proper to draw from the doctrine of comparative cost; then, if the subject is not thoroughly settled, it is well to bring in other doctrines from morality and politics. But before so

doing it should be carefully examined, to see that the doctrines that are brought in to support this economic policy are really good morality and good politics.

In almost every discussion of economic problems this confusion of economic premises with the moral and political is apparent. I will state a few popular doctrines in which this fact is clearly seen.

The right of individuals to the fruit of their own labor looks like a purely economic proposition, yet, when examined more carefully it is really a political one. When we say property is sacred, labor should be free, land ought to become common property, taxation ought to be according to income or that the State should support the poor, other premises than can be obtained from strictly economic sources are needed to justify such conclusions. The claims that property is sacred and that property is robbery have the same economic facts as a basis, but different moralities.

After a given principle has been discarded in the science to which it properly belongs, it often holds its place in a related science, where it creeps in without proper examination. The popularity of economic reasoning causes moral and political arguments to be carried on under its name, because it appeals to a lower motive—that of self-interest. It therefore seems to many writers advisable to keep moral and political principles out of sight, because they do not have that weight with the average man that doctrines have which appeal to self-interest.

If we go back to Adam Smith, when political economy had its beginning, and examine into the political and moral creeds of the time, it will be clearly

seen how much of his system is due to the then prevalent ideas of government and morality. It was then generally accepted as the basis of politics that an unequal distribution of wealth and the consequent misery and vice were due to the oppression of government. It was also thought that all men were born with the same ability, and that there was that equality of condition among individuals which is needed to make absolute freedom of contract beneficial.

As a consequence of these theories, the doctrine of just prices which was handed down from the fathers, was discarded, and competition obtained full sway. In our day competition has been so generally accepted as the regulator of prices, that we can hardly understand the position of our ancestors who made so much of just prices in contrast to those resulting from unrestricted competition. In fact, the average man does not seem to see that there is any moral issue involved in buying as low and selling as high as he is able. Our inability to see the moral issue involved makes many problems seem economic that are plainly moral. The confused thinking due to this fact, leads many persons to desire to overthrow our present economic system, when in reality it is our moral ideas that need reconstruction. We need a new morality and a new politics even more than we need a new economic system. But before we can have any of these desired reforms, we must clearly recognize the distinction between them, and separate the present confused discussion about social affairs into three distinct parts, building up in each division a science that rests upon its own foundation. Each

science will doubtless need premises derived from the others. Any such premise, however, should be accepted consciously and be made a subject of criticism only in the science from which it is obtained, and in relation to other doctrines of which it is a part.

In closing I wish to say a word as to the need of a more complete separation of these sciences in the instruction given in our colleges. A large part of the present confusion in the thinking of our students, is due to the fact that two or more of these sciences are taught by the same professor. Each of these subjects needs a man with peculiar instincts and endowments to teach it in an efficient manner. When an instructor is compelled to teach more than the one for which he is by nature and education fitted, he usually subordinates the other sciences to his favorite, and thus fails to keep clear the lines that separate the one from the other.

Political economy suffers the most from such a combination, because political and moral instincts are older and stronger than the economic, and hence have a greater influence upon the instructor. The science is so young that it is hard to find individuals that are economists by nature. No one fact has hindered the development of economic theory more than the preconceived notions that its investigators have brought to it from other fields of thought, and from which they were incapable of freeing themselves, because these notions were a part of their second nature by inheritance.

This evil can be avoided only when each subject has its own instructor, and he is chosen solely because of his fitness for his especial work. When

this time comes, we can so shape the thinking of our students, that they will master the intricate problems of politics, solve our economic problems, and have the moral force needed to devote their lives to the working out of their ideals in the world about them.